

WHAT IS CLAIMED IS:

1. An electronic device comprising a plurality of operation keys, each of the operation keys comprising:

a transparent button;

a pixel portion formed below the button; and

a driver circuit for controlling the pixel portion;

wherein the pixel portion and the driver circuit are formed over the same substrate,

and

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion.

2. An electronic device which functions as a telephone, comprising a plurality of operation keys, each of the operation keys comprising:

a transparent button;

a pixel portion formed below the button; and

a driver circuit for controlling the pixel portion;

wherein the pixel portion and the driver circuit are formed over the same substrate,

and

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion.

3. An electronic device comprising a plurality of operation keys, each of the operation keys comprising:

a transparent button;  
a pixel portion formed below the button; and  
a driver circuit for controlling the pixel portion;  
wherein the pixel portion and the driver circuit are formed over the same substrate,  
wherein a signal to be input as information to the electronic device by the operation  
keys is displayed in the pixel portion, and  
wherein the direction of the signal displayed in the pixel portion switches.

4. An electronic device which functions as a telephone, comprising a plurality of operation  
keys, each of the operation keys comprising:

a transparent button;  
a pixel portion formed below the button; and  
a driver circuit for controlling the pixel portion;  
wherein the pixel portion and the driver circuit are formed over the same substrate,  
wherein a signal to be input as information to the electronic device by the operation  
keys is displayed in the pixel portion, and  
wherein the direction of the signal displayed in the pixel portion switches.

5. An electronic device comprising:

a first panel comprising a display portion; and  
a second panel comprising a plurality of operation keys:  
wherein the first panel and the second panel are connected,  
wherein each of the operation keys comprises a transparent button, a pixel portion  
formed below the button, and a driver circuit for controlling the pixel portion.

wherein the pixel portion and the driver circuit portion are formed on the same substrate, and

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion.

6. An electronic device functioning as a telephone, comprising:

a first panel comprising a display portion; and

a second panel comprising a plurality of operation keys;

wherein the first panel and the second panel are connected,

wherein each of the operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit portion are formed on the same substrate, and

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion.

7. An electronic device comprising:

a first panel comprising a display portion; and

a second panel comprising a plurality of operation keys;

wherein the first panel and the second panel are connected,

wherein each of the operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit portion are formed on the same substrate,

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion, and

wherein the direction of the signal displayed in the pixel portion switches.

8. An electronic device functioning as a telephone, comprising:

a first panel comprising a display portion; and

a second panel comprising a plurality of operation keys;

wherein the first panel and the second panel are connected,

wherein each of the operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit portion are formed on the same substrate,

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion, and

wherein the direction of the signal displayed in the pixel portion switches.

9. An electronic device comprising a plurality of operation keys, a controller, and a memory,

wherein each of the plurality of operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit are formed over the same substrate, and

image information of a signal input to the electronic device by the operation keys is read out from the memory in accordance with the controller, and the signal is displayed in the pixel

portions.

10. An electronic device comprising a plurality of operation keys, a controller, and a memory,

wherein each of the plurality of operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit are formed over the same substrate,

image information of a signal input to the electronic device by the operation keys is read out from the memory in accordance with the controller, and the signal is displayed in the pixel portions, and

wherein the direction of the signal displayed in the pixel portion switches.

11. An electronic device comprising a plurality of operation keys, a controller, and a memory,

wherein each of the plurality of operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit are formed over the same substrate,

wherein a signal to be input as information to the electronic device by the operation keys is displayed in the pixel portion;

wherein two types of image information, in which the direction of the signal differs, are stored in the memory; and

wherein the direction of the signal displayed in the pixel portion switches by reading out the two types of image information from the memory in accordance with the controller.

12. An electronic device comprising a plurality of operation keys, a controller, and a memory,

wherein each of the plurality of operation keys comprises a transparent button, a pixel portion formed below the button, and a driver circuit for controlling the pixel portion,

wherein the pixel portion and the driver circuit are formed over the same substrate,

wherein image information of a plurality of signals input to the electronic device by the operation keys is stored in the memory;

wherein selected image information of one of the plurality of signals in accordance with the controller and is output from the memory, and the signal is displayed in the pixel portion.

13. The electronic device according to claim 9, wherein the controller and the memory are formed over the same substrate.

14. The electronic device according to claim 10, wherein the controller and the memory are formed over the same substrate.

15. The electronic device according to claim 11, wherein the controller and the memory are formed over the same substrate.

16. The electronic device according to claim 12, wherein the controller and the memory are formed over the same substrate.

17. The electronic device according to claim 9, wherein the memory is one of a flash memory and a mask ROM.

18. The electronic device according to claim 10, wherein the memory is one of a flash memory and a mask ROM.

19. The electronic device according to claim 11, wherein the memory is one of a flash memory and a mask ROM.

20. The electronic device according to claim 12, wherein the memory is one of a flash memory and a mask ROM.

21. The electronic device according to claim 1, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

22. The electronic device according to claim 2, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

23. The electronic device according to claim 3, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

24. The electronic device according to claim 4, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

25. The electronic device according to claim 5, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

26. The electronic device according to claim 6, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

27. The electronic device according to claim 7, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

28. The electronic device according to claim 8, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

29. The electronic device according to claim 9, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

30. The electronic device according to claim 10, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

31. The electronic device according to claim 11, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

32. The electronic device according to claim 12, wherein the pixel portion comprises a plurality of pixels comprising EL elements.

33. The electronic device according to claim 21, wherein the EL elements contain triplet excitation compounds.

34. The electronic device according to claim 22, wherein the EL elements contain triplet excitation compounds.

35. The electronic device according to claim 23, wherein the EL elements contain triplet excitation compounds.

36. The electronic device according to claim 24, wherein the EL elements contain triplet excitation compounds.

37. The electronic device according to claim 25, wherein the EL elements contain triplet excitation compounds.

38. The electronic device according to claim 26, wherein the EL elements contain triplet excitation compounds.

39. The electronic device according to claim 27, wherein the EL elements contain triplet excitation compounds.

40. The electronic device according to claim 28, wherein the EL elements contain triplet excitation compounds.

41. The electronic device according to claim 29, wherein the EL elements contain triplet excitation compounds.

42. The electronic device according to claim 30, wherein the EL elements contain triplet excitation compounds.

43. The electronic device according to claim 31, wherein the EL elements contain triplet excitation compounds.

44. The electronic device according to claim 32, wherein the EL elements contain triplet excitation compounds.

45. The electronic device according to claim 1, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

46. The electronic device according to claim 2, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

47. The electronic device according to claim 3, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

48. The electronic device according to claim 4, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

49. The electronic device according to claim 5, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

50. The electronic device according to claim 6, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

51. The electronic device according to claim 7, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

52. The electronic device according to claim 8, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

53. The electronic device according to claim 9, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

54. The electronic device according to claim 10, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

55. The electronic device according to claim 11, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

56. The electronic device according to claim 12, wherein the pixel portion comprises a plurality of pixels comprising liquid crystal elements.

57. The electronic device according to claim 1, wherein the signal includes characters, numerals, or symbols.

58. The electronic device according to claim 2, wherein the signal includes characters, numerals, or symbols.

59. The electronic device according to claim 3, wherein the signal includes characters, numerals, or symbols.

60. The electronic device according to claim 4, wherein the signal includes characters, numerals, or symbols.

61. The electronic device according to claim 5, wherein the signal includes characters, numerals, or symbols.

62. The electronic device according to claim 6, wherein the signal includes characters, numerals, or symbols.

63. The electronic device according to claim 7, wherein the signal includes characters, numerals, or symbols.

64. The electronic device according to claim 8, wherein the signal includes characters, numerals, or symbols.

65. The electronic device according to claim 9, wherein the signal includes characters, numerals, or symbols.

66. The electronic device according to claim 10, wherein the signal includes characters, numerals, or symbols.

67. The electronic device according to claim 11, wherein the signal includes characters, numerals, or symbols.

68. The electronic device according to claim 12, wherein the signal includes characters, numerals, or symbols.

69. A method of using an electronic device, comprising:

means for displaying image information in input keys; and

conversion means for switch the image information,

wherein predetermined information is input to the electronic device in accordance with the image information displayed in the input keys.

70. A method of using an electronic device, comprising:

means for displaying image information in input keys; and

conversion means for switching the image information,

wherein predetermined information is input to the electronic device in accordance with the image information displayed in the input keys while the image information is switched by the conversion means.

71. A method of using an electronic device, comprising:

means for displaying image information in input keys; and

conversion means for switching the image information,  
wherein predetermined information is stored in a storage medium in accordance with  
the image information displayed in the input keys.

72. A method of using an electronic device, comprising:

means for displaying image information in input keys; and  
conversion means for switching the image information,  
wherein predetermined information is stored in a storage medium in accordance with  
the image information displayed in the input keys while the image information is switched by the  
conversion means.

73. A method of using an electronic device, comprising:

a display device for displaying image information in input keys; and  
means for switching the image information,  
wherein the input keys are operated and predetermined information is input to the  
electronic device in accordance with the image information displayed in the display device.

74. A method of using an electronic device, comprising:

a display device for displaying image information in input keys; and  
conversion means for switching the image information,  
wherein the input keys are operated and predetermined information is input to the  
electronic device in accordance with the image information displayed in the display device while the  
image information is switched by the conversion means.

75. A method of using an electronic device, comprising:

a display device for displaying image information in input keys; and  
means for switching the image information,  
wherein the input keys are operated and predetermined information is stored in a storage medium in accordance with the image information displayed in the display device.

76. A method of using an electronic device, comprising:

a display device for displaying image information in input keys; and  
conversion means for switching the image information,  
wherein the input keys are operated and predetermined information is stored in a storage medium in accordance with the image information displayed in the display device while the image information is switched by the conversion means.

77. A method of using an electronic device, comprising:

input means comprising transparent keys and display devices for displaying image information provided under the transparent keys; and  
conversion means for switching the image information.  
wherein the image information is switched by the conversion means, and  
wherein the image information displayed by the display devices is input to the electronic device by the input means.

78. A method of using an electronic device, comprising:

input means made from transparent keys and display devices for displaying image information formed in portions under the transparent keys; and

conversion means for switching the image information,  
wherein the image information is switched by the conversion means, and  
wherein the image information displayed by the display devices is stored in a storage  
medium by the input means.

79. The method of using an electronic device according to claim 69, wherein an EL display  
device is used as the means for displaying the image information in the input keys.

80. The method of using an electronic device according to claim 70, wherein an EL display  
device is used as the means for displaying the image information in the input keys.

81. The method of using an electronic device according to claim 71, wherein an EL display  
device is used as the means for displaying the image information in the input keys.

82. The method of using an electronic device according to claim 72, wherein an EL display  
device is used as the means for displaying the image information in the input keys.

83. The method of using an electronic device according to claim 69, wherein a liquid crystal  
display device is used as the means for displaying the image information in the input keys.

84. The method of using an electronic device according to claim 70, wherein a liquid crystal  
display device is used as the means for displaying the image information in the input keys.

85. The method of using an electronic device according to claim 71, wherein a liquid crystal

display device is used as the means for displaying the image information in the input keys.

86. The method of using an electronic device according to claim 72, wherein a liquid crystal display device is used as the means for displaying the image information in the input keys.

87. The method of using an electronic device according to claim 69, wherein the predetermined information is transferred to a wireless telephone line.

88. The method of using an electronic device according to claim 70, wherein the predetermined information is transferred to a wireless telephone line.

89. The method of using an electronic device according to claim 71, wherein the predetermined information is transferred to a wireless telephone line.

90. The method of using an electronic device according to claim 72, wherein the predetermined information is transferred to a wireless telephone line.

91. The method of using an electronic device according to claim 73, wherein the predetermined information is transferred to a wireless telephone line.

92. The method of using an electronic device according to claim 74, wherein the predetermined information is transferred to a wireless telephone line.

93. The method of using an electronic device according to claim 75, wherein the

predetermined information is transferred to a wireless telephone line.

94. The method of using an electronic device according to claim 76, wherein the predetermined information is transferred to a wireless telephone line.

95. The method of using an electronic device according to claim 77, wherein the predetermined information is transferred to a wireless telephone line.

96. The method of using an electronic device according to claim 78, wherein the predetermined information is transferred to a wireless telephone line.

97. The method of using an electronic device according to claim 69, wherein the predetermined information is transferred to a telephone line connected to a wire.

98. The method of using an electronic device according to claim 70, wherein the predetermined information is transferred to a telephone line connected to a wire.

99. The method of using an electronic device according to claim 71, wherein the predetermined information is transferred to a telephone line connected to a wire.

100. The method of using an electronic device according to claim 72, wherein the predetermined information is transferred to a telephone line connected to a wire.

101. The method of using an electronic device according to claim 73, wherein the

predetermined information is transferred to a telephone line connected to a wire.

102. The method of using an electronic device according to claim 74, wherein the predetermined information is transferred to a telephone line connected to a wire.

103. The method of using an electronic device according to claim 75, wherein the predetermined information is transferred to a telephone line connected to a wire.

104. The method of using an electronic device according to claim 76, wherein the predetermined information is transferred to a telephone line connected to a wire.

105. The method of using an electronic device according to claim 77, wherein the predetermined information is transferred to a telephone line connected to a wire.

106. The method of using an electronic device according to claim 78, wherein the predetermined information is transferred to a telephone line connected to a wire.

107. The method of using an electronic device according to claim 69, wherein the predetermined information is transferred to the Internet.

108. The method of using an electronic device according to claim 70, wherein the predetermined information is transferred to the Internet.

109. The method of using an electronic device according to claim 71, wherein the

predetermined information is transferred to the Internet.

110. The method of using an electronic device according to claim 72, wherein the predetermined information is transferred to the Internet.

111. The method of using an electronic device according to claim 73, wherein the predetermined information is transferred to the Internet.

112. The method of using an electronic device according to claim 74, wherein the predetermined information is transferred to the Internet.

113. The method of using an electronic device according to claim 75, wherein the predetermined information is transferred to the Internet.

114. The method of using an electronic device according to claim 76, wherein the predetermined information is transferred to the Internet.

115. The method of using an electronic device according to claim 77, wherein the predetermined information is transferred to the Internet.

116. The method of using an electronic device according to claim 78, wherein the predetermined information is transferred to the Internet.

117. The method of using an electronic device according to claim 73, wherein the display

device is an EL display device.

118. The method of using an electronic device according to claim 74, wherein the display device is an EL display device.

119. The method of using an electronic device according to claim 75, wherein the display device is an EL display device.

120. The method of using an electronic device according to claim 76, wherein the display device is an EL display device.

121. The method of using an electronic device according to claim 77, wherein the display device is an EL display device.

122. The method of using an electronic device according to claim 78, wherein the display device is an EL display device.

123. The method of using an electronic device according to claim 73, wherein the display device is a liquid crystal display device.

124. The method of using an electronic device according to claim 74, wherein the display device is an EL display device.

125. The method of using an electronic device according to claim 75, wherein the display

device is an EL display device.

126. The method of using an electronic device according to claim 76, wherein the display device is an EL display device.

127. The method of using an electronic device according to claim 77, wherein the display device is an EL display device.

128. The method of using an electronic device according to claim 78, wherein the display device is an EL display device.